

Fig. 1

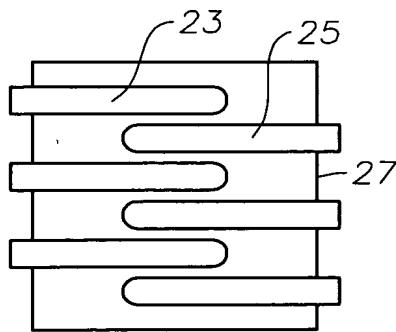


Fig. 2A

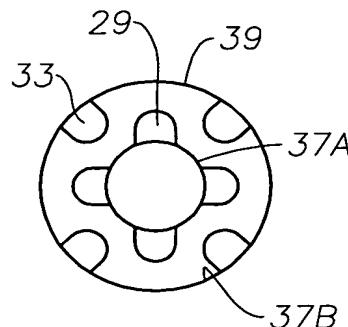


Fig. 2B

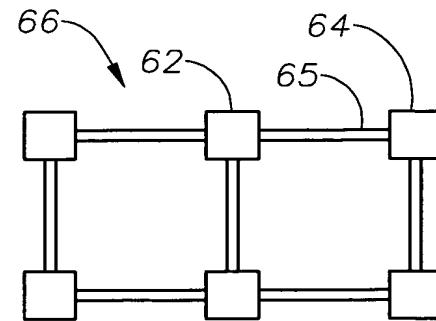


Fig. 5

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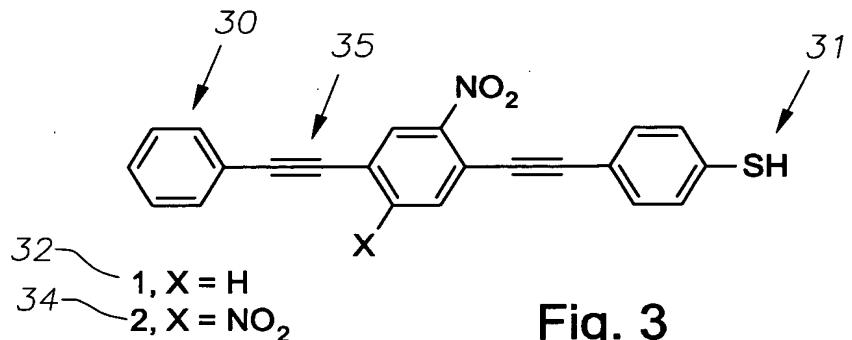


Fig. 3

Untrained Nanocell

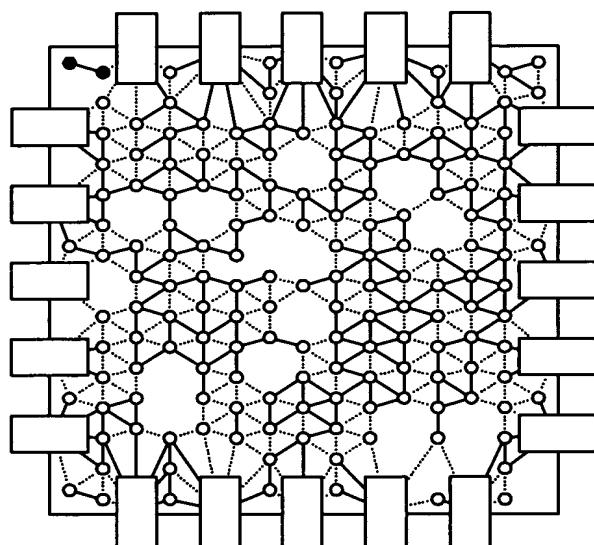


Fig. 7

Nanocell Trained as Inverter

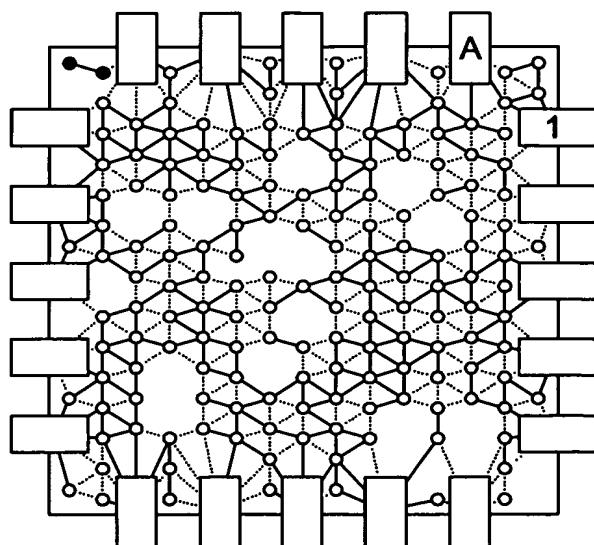


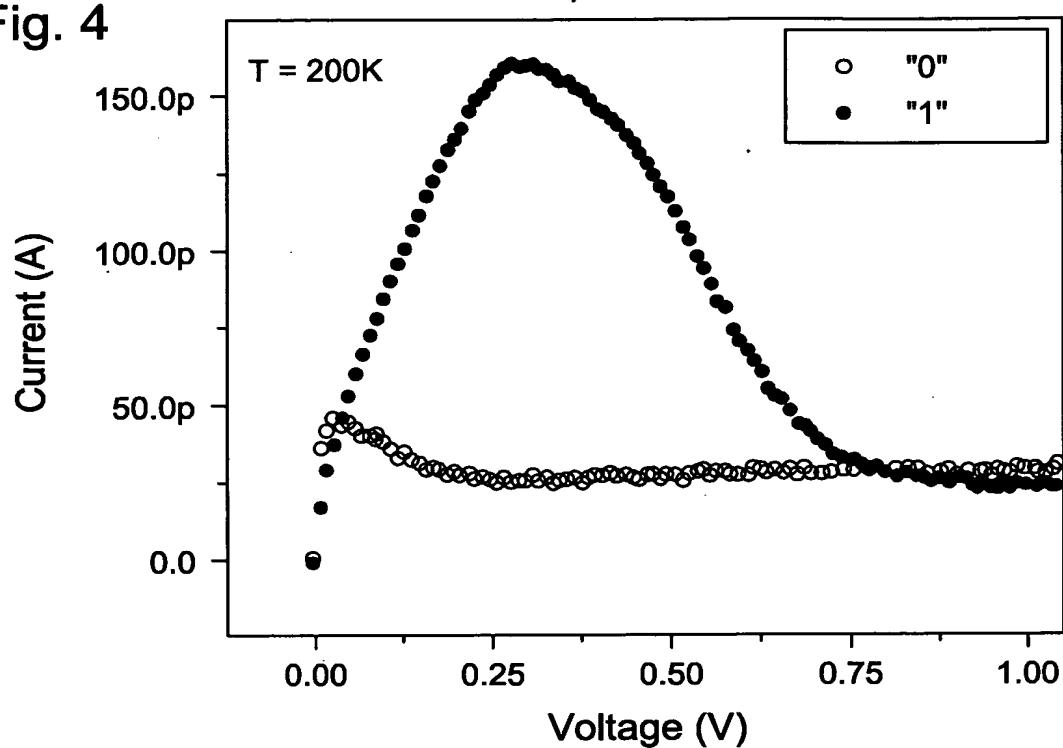
Fig. 8

Inverter Truth Table	
Input A	Output 1
0	1
1	0

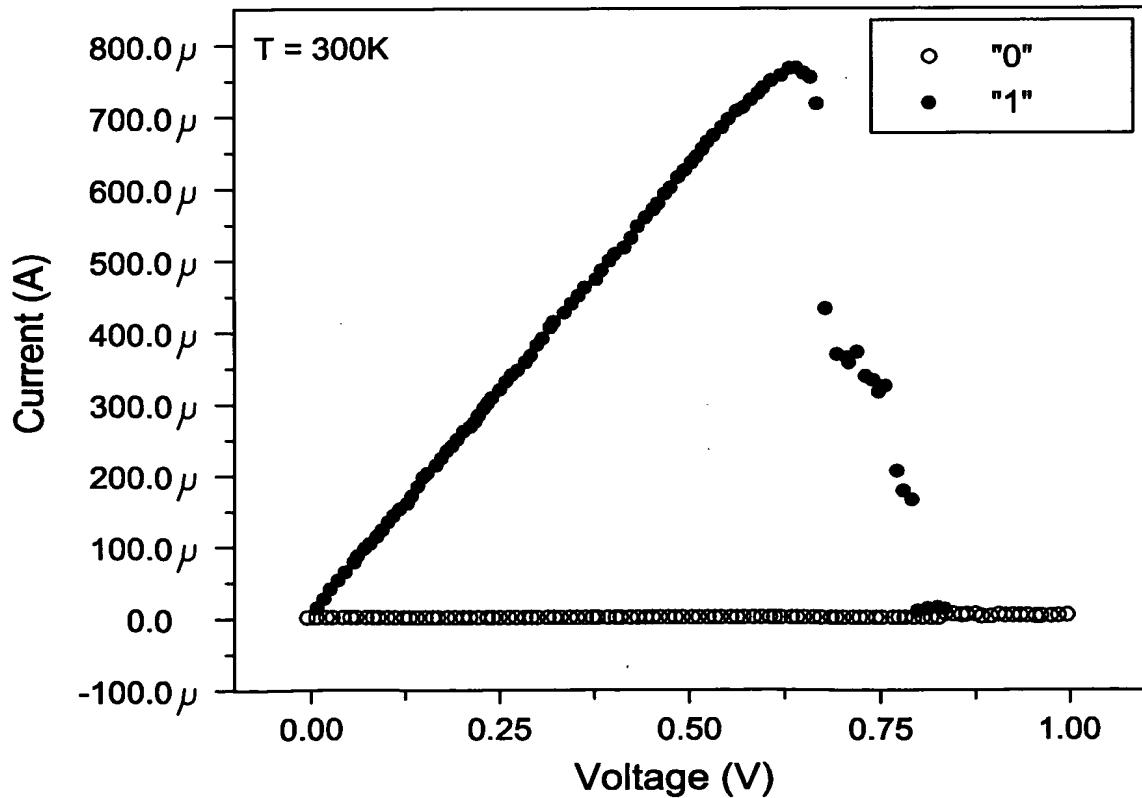
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1, X = H

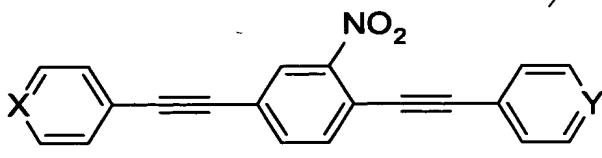
Fig. 4



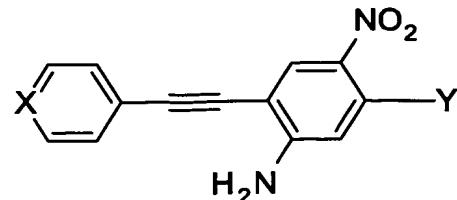
2, X = NO<sub>2</sub>



APPROVED	O. G. FIG.
BY	CLASS
DRAFTSMAN	SUBC: ASS



$X = Y = \text{N}$   
 $X = \text{CH} =, Y = \text{N}$   
 $X = \text{N}, Y = \text{CH}$



$X = \text{N}, Y = \text{ethynylpyridine}$   
 $X = \text{CSAc}, Y = \text{ethynylpyridine}$   
 $X = \text{N}, Y = \text{phenyl}$

Fig. 6

Nanocell Trained as Nand

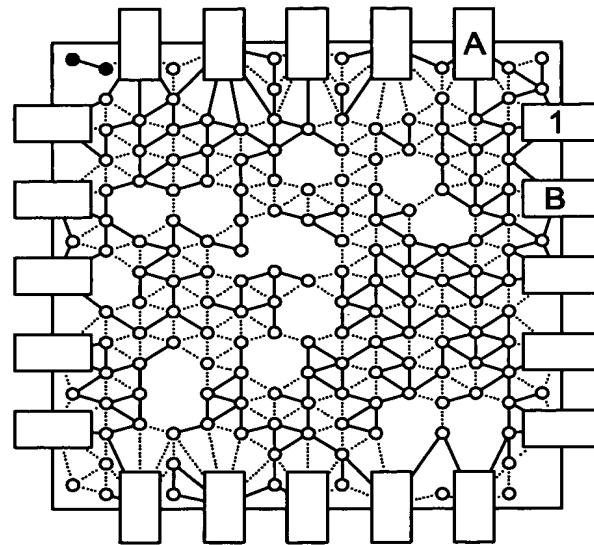


Fig. 9

Nand Truth Table

Input A	Input B	Output 1
0	0	1
0	1	1
1	0	1
1	1	0

Nanocell Trained as Inverse Half Adder

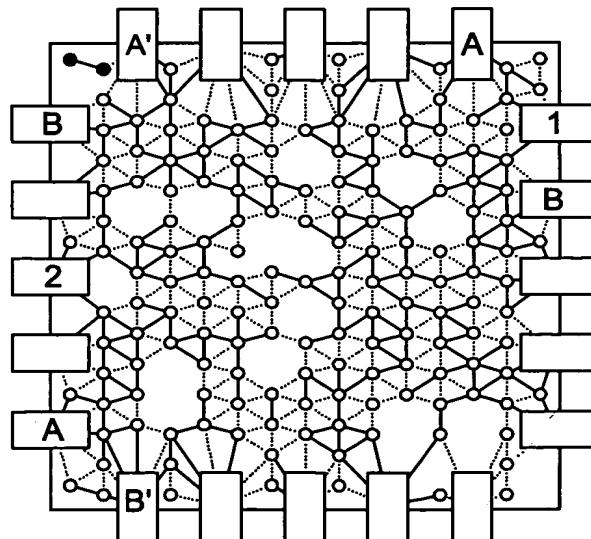


Fig. 10

Inverse of Half Adder Truth Table

Input A	Input B	Output 1	Output 2
0	0	1	1
0	1	1	0
1	0	1	0
1	1	0	1